

***Cimicifuga elata* Nutt.**

tall bugbane

Ranunculaceae (Buttercup family)

Status: State Sensitive, USFWS Species of Concern

Rank: G3S3

General Description: Tall woodland perennial with large expansive, bi- and triternate-toothed leaves. The leaves are downy-hairy above, smooth below and usually arranged in clusters of three, with 9-17 leaflets. The leaflets have 5-7 lobes, coarsely toothed margins and are similar in shape to maple leaves. Stem leaves gradually become smaller as the height of their attachment increases. Plants usually have a single, sometimes branched flowering stem, 3-6 feet tall, from a horizontal rhizome that is up to 4 inches long and 1 inch in diameter. The long, open racemes consist of many 1/4 inch white flowers whose sepals drop at once, giving the appearance of a "bottle brush" of long white stamens and pistils. As its fruits mature, the terminal raceme often becomes declined at a 45-90° angle from the axis of the main stem. The fruit is a dry flat capsule containing approximately 10 red to purple-brown seeds. Each flower usually produces 1 capsule; occasionally 2 or 3 capsules are produced (Ramsey 1965).

Identification Tips: *Cimicifuga elata* is a distinctively tall understory plant of lowland forests. When in bloom, it is unlikely to be confused with other plants of these habitats such as baneberry (*Actaea rubra*), to which it is quite similar when not in flower. Noteworthy features include the large ternately divided leaves and lobed, maple-like leaflets. The foliage is larger than *Actaea* and somewhat hairy on top, unlike *Actaea*, which is smooth.

Cimicifuga has a 3-6 foot tall flowering stem, with small white flowers in a long raceme that mature into flat seed capsules.

Actaea has a short, wide spike of white flowers that mature into red or white berries.

Phenology: Begins flowering in late May and may continue into early August. Only a fraction of all flowers is in bloom at any one time.

Range: *Cimicifuga elata* occurs as far north as extreme southwestern British Columbia, and Whatcom County in Washington. Its range extends west of the Cascade range into southern Oregon. In WA, it occurs in the Western Cascades, Puget Trough, and Olympic Peninsula and Southwest Washington physiographic provinces.

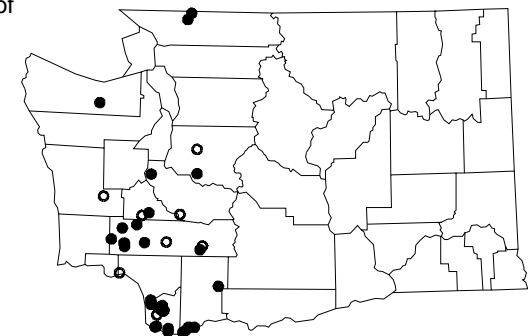
Cimicifuga elata

tall bugbane



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Known distribution of
Cimicifuga elata in
Washington



● Current (1980+)
○ Historic (older than 1980)

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Habitat: In Washington, *Cimicifuga elata* generally grows in or along the margins of mixed, mature or old growth stands of mesic coniferous forest, or mixed coniferous-deciduous forest. Associated species include Douglas fir (*Pseudotsuga menziesii*), western red cedar (*Thuja plicata*), bigleaf maple (*Acer macrophyllum*), red alder (*Alnus rubra*), vine maple (*Acer circinatum*), oceanspray (*Holodiscus discolor*), hazelnut (*Corylus cornuta*), sword fern (*Polystichum munitum*), and snowberry (*Symphoricarpos albus*). Elevations of sites range from just above sea level to 3000 feet. Most sites are at or below 600 feet. *C. elata* frequently occurs along north or east-facing slopes.

Ecology: Old-growth forests provide optimal light conditions for *C. elata*, as they often have scattered canopy openings due to blowdown and mortality that allow more light to reach the under-story. The suppression of, or interference with, dynamic forest processes, such as fire and wind-throw, may reduce or eliminate suitable habitat for *C. elata*.

State Status Comments: Most known populations in Washington are relatively small (<50 plants).

Inventory Needs: Additional inventory is needed throughout its range.

Threats and Management Concerns: Primary threats include habitat loss or modification due to timber management practices. Other threats include competition from invasive, weedy species, residential development and recreational use of some sites. Maintenance of the physical integrity of the remaining habitat is of primary concern. Issues of public access and use need to be addressed in areas that are experiencing trampling and the invasion of weedy herbaceous species.

References:

Hitchcock, C.L., A. Cronquist, M. Ownbey, and J.W. Thompson. 1964. *Vascular Plants of the Pacific Northwest, Part 2: Salicaceae to Saxifragaceae*. University of Washington Press, Seattle. 597 pp.

Ramsey, G. W. 1965. A biosystematic study of the genus *Cimicifuga* (Ranunculaceae). Ph.D. dissertation, University of Tennessee. 265 pp.